

Superfund Redevelopment Initiative

SITE REDEVELOPMENT PROFILE

Medley Farm Drum Dump Superfund Site Gaffney, South Carolina



Site Location: SC Highway 18, Gaffney, South Carolina 29340

Size: 62 acres

Existing Site Infrastructure: Various performance monitoring wells, underground injection wells, groundwater treatment systems and a National Pollutant Discharge Elimination System (NPDES) discharge outfall remain at the site.

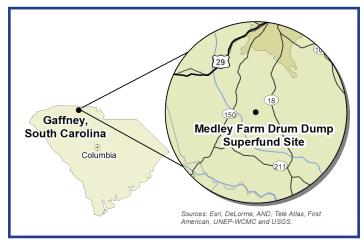
Current Site Uses: The site includes a 2.5-acre pollinator habitat, established in May 2020, and a 2-acre residential property.

Use Restrictions: Institutional controls, recorded with the property deed, restrict residential and groundwater use on 34 acres of the site until cleanup goals are achieved.

Surrounding Population: Within 0.5 mile, 60 people; within 2.5 miles, 1,113 people; within 4 miles, 4,303 people.

Since the 1980s, EPA has worked with the South Carolina Department of Health and Environmental Control (SCDHEC) and the site's potentially responsible parties (PRPs) to clean up the Medley Farm Drum Dump Superfund site and return it to beneficial reuse. In 2020, EPA and the PRPs completed work to install 2.5 acres of pollinator habitat at the site in an effort to address the decline of pollinator species across the United States. A pollinator is an animal that moves pollen from plant to plant. Pollinators sustain ecosystems and protect natural resources by helping plants reproduce.

During the period of 1973 to 1983, historical records show that several textile, paint and chemical manufacturing firms disposed of



Location of the site in Gaffney, South Carolina.

August 2020 1

SITE HISTORY AND REDEVELOPMENT TIMELINE

1973- 1976	Several companies paid to dispose of industrial waste at the site.
1983	SCDHEC started initial site investigations.
	EPA completed an emergency removal action.
1987- 1988	EPA led site investigations and identified site PRPs.
1989	EPA added the site to the NPL.
1994	PRPs began cleanup under a Consent Decree with EPA.
2004	Soil cleanup completed. Operation of the site's soil and groundwater treatment systems ended.
	Supplemental groundwater cleanup activities began.
2012	EPA updated the groundwater remedy.
2019	Planning for ecological reuse began.
2020	A 2.5-acre pollinator habitat was established

on site.



1.2
acres of meadowland restored



pounds of VOCs removed from contaminated water



√100 million

gallons of

contaminated

groundwater treated



✓ 2,250

pounds of VOCs
removed from
contaminated soil

industrial waste at the site. In 1983, an initial SCDHEC site investigation found nearly 2,000 drums present at the site. EPA then led an emergency removal action and removed 5,383 drums and pails of waste, 2,132 cubic yards of refuse soil, 24,000 gallons of drum liquid, and 70,000 gallons of water and sludge from six small waste lagoons. Between 1984 and 1987, EPA and SCDHEC conducted more site investigations to understand environmental conditions. These investigations found that waste disposal activities resulted in soil and groundwater contamination with various volatile organic compounds (VOCs). EPA added the site to the Superfund program's National Priorities List (NPL) in 1989.

From 1990 through 2016, the site's PRPs, with oversight from EPA and SCDHEC, conducted a wide range of field investigations, remedial design work and remedial response actions to clean up site environmental conditions. From 1995 to 2004, the PRPs operated soil vapor extraction (SVE) and groundwater extraction and treatment systems on site. In 2004, the PRPs completed soil cleanup activities and EPA authorized the PRPs to stop the soil treatment system. Also in 2004, the PRPs shut down the

August 2020 2

groundwater recovery and treatment system and started supplemental groundwater cleanup using in-situ treatment of the VOC-affected groundwater using anaerobic microbes. During active treatment operations, the groundwater treatment system recovered and treated more than 100 million gallons of groundwater, removing more than 243 pounds of VOCs. The soil treatment system removed more than 2,250 pounds of VOCs from the soil. The PRPs have performed long-term performance monitoring of the groundwater and surface water during the supplemental groundwater treatment activities.

"Having been involved at the Medley Farm NPL site since 1992, I find it especially satisfying to look back on the many changes and improvements that have occurred at this site over the years. As an environmental professional, it is very gratifying when the opportunity arises to close out a site remedy with a beneficial reuse as the end-product."

Dr. Steve Webb, Project Manager, TRC Environmental Corporation

In 2019, EPA approved the decommissioning and abandonment of the soil treatment system. In response, the PRPs removed SVE equipment and wells, and backfilled/revegetated the former well locations and disturbed soil areas. These actions restored about 1.2 acres of meadowland, enabling the transformation of the former soil treatment area into a pollinator-friendly habitat zone.

In May 2020, EPA and the PRPs worked together to establish a 2.5-acre pollinator habitat on the site. The effort included the planting of a native pollinator meadow across the former soil treatment area. The meadow area includes a mix of native wildflower species with various flowering trees and shrubs planted around the perimeter. The creation of the area helps address the global loss of pollinator habitat. The area benefits the environment, providing habitat for pollinators that help plants reproduce. The meadow and surrounding trees and shrubs support a variety of other wildlife such as birds and deer. The pollinator area also reduces the need for ongoing maintenance activities. Future

mowing requirements at the site may be reduced from quarterly to twice per year.

The site's successful cleanup and reuse shows how effective partnerships and collaboration between diverse site stakeholders can transform formerly contaminated Superfund sites into areas that provide significant environmental and public health benefits. In this case, a pollinator area now provides valuable habitat for native pollinators, plants and wildlife in an area that was previously characterized by industrial waste disposal and contaminated soils.





FOR MORE INFORMATION

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August 2020 3